

LPDES PERMIT NO. LA0052370, AI No. 3585

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** Calcasieu Refining Company
4359 West Tank Farm Road
Lake Charles, Louisiana 70605
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard
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Date Prepared: July 6, 2006

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed revoke and reissue of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit - NPDES permit effective date: N/A**
NPDES permit expiration date: N/A

EPA has not retained enforcement authority

- C. LPDES permit - LPDES permit effective date: August 1, 2003**
LPDES permit expiration date: July 31, 2008

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- D. Application received on March 31, 2006. Additional information received on August 31, 2006.

V. Facility Information:

- A. Location - 4359 West Tank Farm Road in Lake Charles
- B. Applicant Activity -

According to the application, Calcasieu Refining Company, is a petroleum refinery and manufactures liquefied petroleum gas (LPG), naphtha, kerosene, diesel, mineral spirits, gas oil, reduced crude and other similar petroleum products. These refined petroleum products are sold and transported offsite by barge, product pipeline, and tanker truck.

Calcasieu Refining Company has requested LDEQ revoke and reissue this LPDES permit in lieu of a major modification to address the incorporation of two sanitary outfalls and five low contamination potential stormwater outfalls from a newly acquired facility (former Haymark Terminal - LA0112097). Historically, Haymark Terminal has been owned and operated by Shell Pipeline Company and most recently owned and operated by Equilon Enterprises, LLC. This facility was sold by Shell Oil Company to Equilon Pipeline Company LLC on October 4, 2000 and to Calcasieu Refining Company in 2004.

Calcasieu Refining Company also has a Hydrostatic Test General Permit, LAG670081. At the company's request, the hydrostatic test discharges will be incorporated into the proposed permit and the Hydrostatic Test General Permit will be terminated.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline
Refinery Guidelines

Reference
40 CFR 419
Subpart A

Feedstock rate to Topping Unit(s), 1000 bbl/day -	83.0
Process Unit Rates, 1000 bbl/day:	
Crude Desalting -	83.0
Atmospheric Crude Distillation -	83.0
Ballast water flow, 1000 gal/day -	1.9

The contaminated stormwater contribution to Outfall 001 is taken from Part Seven of the facility's LPDES permit application dated February 2006, and is reported in the application as 7.5 gpm (10.8 Kgal/day) + 4.2 gpm (6.048 Kgal/day) from first flush stormwater that is routed from other outfalls to be treated at Outfall 001.

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).
Louisiana Water Quality Management Plan for Sanitary Dischargers.
LDEQ Sanitary General Permits

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LDEQ Hydrostatic Test General Permit
Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: Major
 2. Complexity Type: V
 3. Wastewater Type: II
 4. SIC code: 2911
- E. Continuous Facility Effluent Flow - 0.39168 MGD.

VI. Receiving Waters: Calcasieu River via a lined concrete trench

1. TSS (15%), mg/L: 10
2. Average Hardness, mg/L CaCO_3 : 1513.57
3. Critical Flow, cfs: 342
4. Mixing Zone Fraction: 1/3
5. Harmonic Mean Flow, cfs: 1026
6. River Basin: Calcasieu River, Segment No. 030301
7. Designated Uses:

The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from monitoring station 26 on the Calcasieu River near Burton Landing listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This information is contained in a memorandum from Brian Baker to Jennifer Sheppard, dated July 20, 2006.

VII. Outfall Information:

Outfall 001 (Interim and Final)

- A. Type of wastewater - treated process wastewater and process area stormwater, and utility wastewater including boiler blowdown, hydrostatic test wastewater, and washdown wastewater.
- B. Location - at the point of discharge from the north side of the plant on the shoreline of the Calcasieu River, situated between the #1 and #2 Dock location prior to combining with the waters of the Calcasieu River via a lined concrete trench at Latitude 30°08'05", Longitude 93°19'16".
- C. Treatment - treatment of process wastewaters consists of:
- oil/water separator
 - neutralization
 - equalization
 - aeration
 - biotreatment
 - clarification

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D. Flow - Continuous Flow 0.39168 MGD.

Process Wastewater*	0.272 MGD
Utility Wastewater*	0.101 MGD
Process Area Stormwater*	0.017 MGD
Ballast Wastewater*	0.003 MGD

* Specific component waste streams are defined at Appendix A-1.

E. Receiving waters - Calcasieu River via a lined concrete trench

F. Basin and segment - Calcasieu River Basin, Segment 030301

G. Effluent Data - The effluent data are contained in Section 2 and 3 of the LPDES permit application dated February 2006.

Outfall 002

A. Type of wastewater - the discharge of low contamination potential stormwater runoff from storage tank secondary containment areas (first 0.5" (15 minutes) of rain event, stormwater will be routed to the wastewater treatment system used for Outfall 001 wastewaters), non-contact cooling water, and previously monitored hydrostatic test wastewater from Internal Outfall 013.

B. Location - at the point of discharge from the north side of the plant on the shoreline of the Calcasieu River, situated between the #1 and #2 Dock location, prior to combining with the waters of the Calcasieu River via a lined concrete trench at Latitude 30°08'05", Longitude 93°19'16".

C. Treatment - None following the first 0.5" (15 minutes) of rain event, stormwater will be routed to the wastewater treatment system used for Outfall 001 wastewaters.

D. Flow - Intermittent

E. Receiving waters - Calcasieu River via a lined concrete trench

F. Basin and segment - Calcasieu River Basin, Segment 030301

G. Effluent Data - The effluent data are contained in Section 3 of the LPDES permit application dated February 2006.

Outfall 003

A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the middle and northern end of the plant in the vicinity of the maintenance building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

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- B. Location - at the point of discharge from the northeast side of the plant, at the northern end of the ditch (east side of the property) prior to combining with the waters of the Calcasieu River at Latitude 30°08'07", Longitude 93°19'15".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Calcasieu River via a lined concrete trench
- F. Basin and segment - Calcasieu River Basin, Segment 030301
- G. Effluent Data - The effluent data are contained in Section 3 of the LPDES permit application dated February 2006.

Outfall 004

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the middle and southern end of the plant in the vicinity of the office building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - Discharge to the Calcasieu River via local drainage at Latitude 30°07'56", Longitude 93°19'14".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Guy via local drainage, thence to the Calcasieu River.
- F. Basin and segment - Calcasieu River Basin, Segment 030301
- G. Effluent Data - The effluent data are contained in Section 3 of the LPDES permit application dated February 2006.

Outfall 005

- A. Type of wastewater - the discharge of treated sanitary wastewater from the main office and operations buildings
- B. Location - at the point of discharge from the treatment facility on the south side of the plant near the office area, prior to combining with any other waters at Latitude 30°07'58", Longitude 93°19'13".
- C. Treatment - treatment of sanitary wastewaters consists of:
 - mechanical aerobic treatment
 - chlorination
- D. Flow - (Max 30 day) 0.00072 MGD

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- E. Receiving waters - Bayou Guy via local drainage, thence to the Calcasieu River.
- F. Basin and segment - Calcasieu River Basin, Segment 030301
- G. Effluent Data - The effluent data are contained in Section 3 of the LPDES permit application dated February 2006.

Outfall 006

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the west side of the product tank farm (former Haymark Terminal Outfall 001) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - at the point of discharge from the south side of product tank farm area, prior to commingling with other waters at Latitude 30°07'55", Longitude 93°19'19".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Guy via local drainage, thence to the Calcasieu River.
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 007

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the east side of the product tank farm (former Haymark Terminal Outfall 002) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - at the point of discharge from the south side of the product tank farm area, prior to commingling with other waters at Latitude 30°07'57", Longitude 93°19'10".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Guy via local drainage, thence to the Calcasieu River.
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 008

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the southeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - at the point of discharge from the southeast side of the property, prior to commingling with other waters at Latitude 30°07'59", Longitude 93°19'11".

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- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Bayou Guy via local drainage, thence to the Calcasieu River.
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 009

- A. Type of wastewater - the discharge of treated sanitary wastewater from the contractor break area/laboratory building
- B. Location - at the point of discharge from the treatment facility on the north side of the property, prior to commingling with other waters at Latitude 30°08'07", Longitude 93°19'19".
- C. Treatment - treatment of sanitary wastewaters consists of:
 - mechanical aerobic treatment
 - chlorination
- D. Flow - (Max 30-Day) 0.00072 MGD.
- E. Receiving waters - Calcasieu River
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 010

- A. Type of wastewater - the discharge of treated sanitary wastewater from the maintenance shop/office buildings.
- B. Location - at the point of discharge from the treatment facility on the northeast side of the property, prior to commingling with other waters at Latitude 30°08'09", Longitude 93°19'00".
- C. Treatment - treatment of sanitary wastewaters consists of:
 - mechanical aerobic treatment
 - chlorination
- D. Flow - (Max 30-Day) 0.00072 MGD.
- E. Receiving waters - Calcasieu River
- F. Basin and segment - Calcasieu River Basin, Segment 030301

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Outfall 011

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the north side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - at the point of discharge on the north side of the plant between Dock No. 2 and the maintenance building, prior to commingling with other waters at Latitude 30°08'08", Longitude 93°19'10".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Calcasieu River via a lined concrete trench.
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 012

- A. Type of wastewater - the discharge of low contamination potential stormwater runoff from the northeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.
- B. Location - at the point of discharge on the northeast side of the plant near the maintenance building, prior to commingling with other waters at Latitude 30°08'08", Longitude 93°19'10".
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Calcasieu River via a lined concrete trench
- F. Basin and segment - Calcasieu River Basin, Segment 030301

Internal Outfall 013

- A. Type of wastewater - the discharge of hydrostatic test wastewater.
- B. Location - at the point of discharge from the vessel or pipeline being tested prior to combining with any other waters. This wastewater can be discharged through Final Outfalls 002, 003, 004, 006, 007, 008, 011, or 012.
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Calcasieu River via a lined concrete trench (Outfalls 002, 003, 011, and 012) and Bayou Guy via local drainage, thence to the Calcasieu River (Outfalls 004, 006, 007, 008).

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- F. Basin and segment - Calcasieu River Basin, Segment 030301

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current NPDES Permit:

- A. Outfall 001 - the production rate has increased from 60,000 barrels per day to 83,000 barrels per day. Limitations were assigned in accordance with the refinery guidelines at 40 CFR 419, Subpart A.
- B. Outfall 001 - a compliance schedule has been added to this outfall for clarification that Final Limitations under the Calcasieu Toxics TMDL shall be achieved by Calcasieu Refining no later than June 13, 2008. In accordance with LAC 33:IX.1109.D.1, additional language has been incorporated in Part II.K requiring the permittee to submit annual progress reports to this Office outlining the status of compliance with the water quality based effluent limitations for TMDL parameters until compliance is achieved.
- C. Outfall 001 - A Minimum Quantification Level (MQL) evaluation was done for the parameters listed in the Calcasieu Estuary Toxics TMDL. The evaluation was done to determine compliance with the waste load allocations (WLAs) established in the TMDL and to ensure state water quality standards are being met. Based on Calcasieu Refining's flow and the assigned WLAs, it has been determined that site specific MQLs for benzo(a)anthracene and benzo(a)pyrene are necessary to ensure compliance and therefore, these MQLs have been established in Part II.J of the permit.
- D. Outfalls 002, 003, and 004 - The units for Total Copper and Total Mercury monitoring have been changed from lbs/day to mg/L. Since these outfalls are intermittent in nature, concentration limits are more appropriately applied.
- E. Outfalls 002, 003, and 004 - The Monthly Average reporting requirement for Total Copper and Total Mercury has been dropped. The permittee shall report Daily Maximum values only for these parameters.
- F. Outfalls 006, 007, 008, 011, and 012 - low contamination potential stormwater outfalls from a newly acquired facility (former Haymark Terminal). The proposed monitoring frequencies and limitations were established in accordance with current stormwater guidance and Best Professional Judgment (BPJ).
- G. Outfall 006, 007, 008, 011, and 012 - Total Copper and Total Mercury reporting has been established in accordance with the Calcasieu Toxics TMDL issued in the Federal Register on June 13, 2002. Initial reporting on stormwater Outfalls 002, 003, and 004 have shown the presence of these pollutants in the stormwater at Calcasieu Refining Company, therefore, monitor and report only requirements have been established for the newly acquired outfalls.
- H. Outfalls 009 and 010 - treated sanitary outfalls from a newly acquired facility (former Haymark Terminal). The proposed monitoring frequencies and limitations were established

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in accordance with the LPDES Class I Sanitary General Permit and Best Professional Judgment (BPJ).

- I. Outfall 013 - newly created outfall for hydrostatic test discharges. Calcasieu Refining Company has a current Hydrostatic Test General Permit, LAG670081. At the company's request, the hydrostatic test discharges will be incorporated into the proposed permit and the Hydrostatic Test General Permit shall be terminated upon issuance of the final permit.
- J. Language under Part II.L, regarding monitoring for Total Copper and Total Mercury has been modified. Under the current LPDES permit, effective August 1, 2003, Calcasieu Refining Company could drop monitoring of these parameters by way of notification if the analytical data came back non-detect for 12 consecutive quarters. This language has been changed requiring a written request and approval prior to discontinuing monitoring.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. Outfall 001 - Process Wastewaters

***Outfall 001 (Interim)** - treated process wastewater and process area stormwater, and utility wastewater including boiler blowdown, hydrostatic test wastewater, and washdown wastewater.

Calcasieu Refining Company, Calcasieu Refining Company is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

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Manufacturing Operation
Refinery

Guideline
40 CFR 419, Subpart A

Calculations and basis of permit limitations are found at Appendix A and associated appendices. See below for site-specific considerations.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(lbs/day)</u>	<u>DAILY MAXIMUM</u> <u>(lbs/day)</u>
Flow (MGD)	Report	Report (continuous recording)
BOD ₅	280	527
TSS	237	369
Oil & Grease	86	165
COD	1412	2733
Ammonia (as N)	29	64
Sulfide (as S)	1.6	3.4
Phenolic Compounds	0.5	2.2
Total Chromium	0.7	1.9
Hexavalent Chromium (6+)	0.1	0.1
Total Copper(**)	---	Report
Total Mercury(**)	---	Report
Benzo (a) anthracene(**)	---	Report
Benzo (a) pyrene(**)	---	Report
pH (standard units)	6.0 (*)	9.0 (*)

(*) continuous recorder with pH excursion requirements.

(**) Water quality requirements

Site-Specific Consideration(s) for Interim Outfall 001

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

BOD₅, TSS, Oil & Grease, COD, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, Hexavalent Chromium - limitations established in accordance with Refinery Guidelines under 40 CFR 419, Subpart A for the Topping Subcategory based on the production of 83,000 barrels per day (See Appendix A).

Total Copper, Total Mercury, Benzo (a) anthracene, Benzo (a) pyrene - Requirements were retained from the current LPDES permit, effective on August 1, 2003, and were based on the

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requirements of the Calcasieu Toxics TMDL effective on June 13, 2002.

pH - established in accordance with LAC 33.IX.1113.C.1.

***Outfall 001 (Final)** - treated process wastewater and process area stormwater, and utility wastewater including boiler blowdown, hydrostatic test wastewater, and washdown wastewater.

Calcasieu Refining Company, Calcasieu Refining Company is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation

Refinery

Guideline

40 CFR 419, Subpart A

Calculations and basis of permit limitations are found at Appendix A and associated appendices. See below for site-specific considerations.

PARAMETER	MONTHLY AVERAGE (lbs/day)	DAILY MAXIMUM (lbs/day)
Flow (MGD)	Report	Report (continuous recording)
BOD ₅	280	527
TSS	237	369
Oil & Grease	86	165
COD	1412	2733
Ammonia (as N)	29	64
Sulfide (as S)	1.6	3.4
Phenolic Compounds	0.5	2.2
Total Chromium	0.7	1.9
Hexavalent Chromium (6+)	0.1	0.1
Total Copper(**)	---	1.5600
Total Mercury(**)	---	0.0108
Benzo (a) anthracene(**)	---	0.0908
Benzo (a) pyrene(**)	---	0.0908
pH (standard units)	6.0 (*)	9.0 (*)

(*) continuous recorder with pH excursion requirements.

(**) Water quality requirements

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Site-Specific Consideration(s) for Final Outfall 001

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

pH - established in accordance with LAC 33:IX.1113.C.1.

BOD₅, TSS, Oil & Grease, COD, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, Hexavalent Chromium - limitations established in accordance with Refinery Guidelines under 40 CFR 419, Subpart A for the Topping Subcategory based on the production of 83,000 barrels per day.

Total Copper and Total Mercury, Benzo (a) anthracene, and Benzo (a) pyrene - Requirements were retained from the current LPDES permit, effective on August 1, 2003, and were based on the requirements of the Calcasieu Toxics TMDL effective on June 13, 2002.

2. Outfalls 002 & 013 - Utility Wastewaters

***Outfall 002** - the discharge of low contamination potential stormwater runoff from storage tank secondary containment areas (first 0.5" (15 minutes) of rain event, stormwater will be routed to the wastewater treatment system used for Outfall 001 wastewaters), non-contact cooling water, and previously monitored hydrostatic test wastewater from Internal Outfall 013.

Utility wastewaters shall receive BPJ limitations/monitoring requirements according to the following schedule:

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(mg/L)</u>	<u>DAILY MAXIMUM</u> <u>(mg/L)</u>
Flow (MGD)	Report	Report
TOC	---	50
Oil & Grease	---	15
Total Copper	---	Report
Total Mercury	---	Report
pH (standard units)	6.0	9.0

Site-Specific Consideration(s) for Outfall 002

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

TOC & Oil & Grease - limitations were retained from the current LPDES permit, effective on August 1, 2003 and were based on similarly permitted discharges, current stormwater guidance, and Best Professional Judgment (BPJ).

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Total Copper & Total Mercury - Monitor/reporting requirements were retained from the current LPDES permit, effective on August 1, 2003, and were based on the requirements of the Calcasieu Toxics TMDL effective on June 13, 2002. However, units have been changed from lbs/day to mg/L. Since this outfall is intermittent in nature, concentration limits are more appropriately applied.

pH - established in accordance with LAC 33.IX.1113.C.1.

***Internal Outfall 013** - the discharge of hydrostatic test wastewater.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(mg/L)</u>	<u>DAILY MAXIMUM</u> <u>(mg/L)</u>
Flow (MGD)	Report	Report
TSS	---	90
Oil & Grease	---	15
TOC	---	50
Benzene	---	50 µg/L
Total BTEX	---	250 µg/L
Total Lead	---	50 µg/L
pH (standard units)	6.0	9.0

Site-Specific Consideration(s) for Outfall 013

Flow, TSS, Oil & Grease, TOC, Benzene, Total BTEX, Total Lead, and pH - permit limitations are consistent with those established in the LPDES Hydrostatic Test General Permit.

Flow, TSS, and Oil and Grease, and pH are the only testing requirements for new pipe or vessels.

3. Outfall(s) 003, 004, 006, 007, 008, 011, and 012 - Stormwater

***Outfall 003** - the discharge of low contamination potential stormwater runoff from the middle and northern end of the plant in the vicinity of the maintenance building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 004** - the discharge of low contamination potential stormwater runoff from the middle and southern end of the plant in the vicinity of the office building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 006** - the discharge of low contamination potential stormwater runoff from the west side of the product tank farm (former Haymark Terminal Outfall 001) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

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***Outfall 007** - the discharge of low contamination potential stormwater runoff from the east side of the product tank farm (former Haymark Terminal Outfall 002) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 008** - the discharge of low contamination potential stormwater runoff from the southeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 011** - the discharge of low contamination potential stormwater runoff from the north side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 012** - the discharge of low contamination potential stormwater runoff from the northeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

Uncontaminated or low potential contaminated stormwater discharged through discrete outfall(s) not associated with process wastewater shall receive the following BPJ limitations in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(mg/L)</u>	<u>DAILY MAXIMUM</u> <u>(mg/L)</u>
Flow (MGD)	Report	Report
TOC	---	50
Oil & Grease	---	15
Total Copper	---	Report
Total Mercury	---	Report
pH (standard units)	6.0	9.0

Site-Specific Consideration(s) for Outfalls 003, 004, 006, 007, 008, 011, and 012

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

TOC & Oil & Grease - Limitations based on similarly permitted discharges, current stormwater guidance, and Best Professional Judgment (BPJ).

Total Copper & Total Mercury - Reporting requirements were established based on the requirements of the Calcasieu Toxics TMDL effective on June 13, 2002. Calcasieu Refining Company may request removal of the monitoring requirements for Total Copper and Total Mercury on the stormwater Outfalls (002, 003, 004, 006, 007, 008, 011, and 012) if sample results indicate non-detect for twelve (12) consecutive quarters. The permittee shall provide the analyses, along with a written modification request for removal of these parameters. These requirements shall be discontinued upon receipt of written approval from this Office.

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Also, the Monthly Average monitoring requirement for Total Copper and Total Mercury has been determined unnecessary, therefore it has been deleted.

pH - established in accordance with LAC 33:IX.1113.C.1.

In accordance with LAC 33:IX.2707.I.3 and [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

4. Outfalls 005, 009, and 010 - Sanitary Wastewaters

***Outfall 005** - the discharge of treated sanitary wastewater from the main office and operations buildings

***Outfall 009** - the discharge of treated sanitary wastewater from the contractor break area/laboratory building

***Outfall 010** - the discharge of treated sanitary wastewater from the maintenance shop/office buildings.

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(mg/L)</u>	<u>WEEKLY AVERAGE</u> <u>(mg/L)</u>
Flow (MGD)	Report	Report
BOD5	---	45
TSS	---	45
Fecal Coliform colonies/100 ml	---	400
pH (standard units)	6.0	9.0

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Site-Specific Consideration(s) for Outfalls 005, 009, and 010

Sanitary wastewaters are regulated in accordance with LAC 33:IX.711 or 709.B, by BPJ utilizing the sanitary general permits issued by this Office, and the Louisiana Water Quality Management Plan, Appendices A (Areawide Sanitary Effluent Limits Policy) and B (Statewide Sanitary Effluent Limits Policy), as applicable. Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits:

PARAMETER(S)
Total Copper
Total Mercury
Benzo(a)anthracene
Benzo(a)pyrene

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

TMDL Waterbodies

Outfall 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, and 013

The discharges from outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, and 013, including process wastewater, process area stormwater, utility wastewater, sanitary wastewater, and non-process area stormwater to Calcasieu River, Segment No. 030301. The Calcasieu River is listed on the 303(d) report as being impaired with copper, mercury, priority

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organics, ammonia, and contaminated sediments (metals, organics, and toxicity). To date four TMDLs have been finalized and one impairment has been delisted for the Upper Calcasieu Estuary.

The Upper Calcasieu Estuary TMDL for Copper was finalized June 13, 2002, addressing the presence of total copper. This TMDL requires daily maximum effluent limitation of 1.56 lbs/day Total Copper for Calcasieu Refining Company in order to bring this subsegment into compliance with water quality standards. The limitation has been implemented into this permit on Outfall 001 and shall become effective on June 13, 2008.

Monitor and report only requirements for Total Copper have been applied on all stormwater outfalls (002, 003, 004, 006, 007, 008, 011, and 012) in accordance with the requirements of this TMDL.

Outfalls 005, 009, and 010 include sanitary discharges only. These discharges are not reasonably expected to cause further copper impairment, therefore, no additional requirements have been placed on these outfalls.

Outfall 013 - hydrostatic test discharges are not reasonably expected to cause further copper impairment. Since this is an internal outfall and since copper monitoring has been placed on all final outfalls that could accept this wastewater, no additional requirements are necessary.

The Upper Calcasieu Estuary TMDL for Mercury was finalized June 13, 2002, addressing the presence of total mercury. This TMDL requires daily maximum effluent limitation of 0.0108 lbs/day Total Mercury for Calcasieu Refining Company in order to bring this subsegment into compliance with water quality standards. The limitation has been implemented into this permit on Outfall 001 and shall become effective on June 13, 2008.

Monitor and report only requirements for Total Mercury have been applied on all stormwater outfalls (002, 003, 004, 006, 007, 008, 011, and 012) in accordance with the requirements of this TMDL.

Outfalls 005, 009, and 010 include sanitary discharges only. These discharges are not reasonably expected to cause further mercury impairment, therefore, no additional requirements have been placed on these outfalls.

Outfall 013 - hydrostatic test discharges are not reasonably expected to cause further mercury impairment. Since this is an internal outfall and since mercury monitoring has been placed on all final outfalls that could accept this wastewater, no additional requirements are necessary.

The Upper Calcasieu Estuary TMDL for Contaminated Sediments was finalized June 13, 2002, addressing the presence of Polynuclear Aromatic Hydrocarbons (PAH). This TMDL requires a monthly average effluent limitation of 0.0908 lbs/day Polynuclear Aromatic Hydrocarbons for Calcasieu Refining Company in order to bring this subsegment into compliance with water quality standards. The limitation has been implemented into this permit on Outfall 001 and shall become effective on June 13, 2008.

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Outfalls 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, and 013 include stormwater, sanitary discharge, and hydrostatic test wastewater. These discharges are not reasonably expected to cause further contaminated sediment impairment, therefore, no additional requirements have been placed on these outfalls.

The Upper Calcasieu Estuary TMDL for Priority Organics was finalized June 13, 2002, addressing the presence of organics. This TMDL requires testing effluents quarterly for chronic toxicity in order to bring this subsegment into compliance with water quality standards. Chronic toxicity testing has been implemented into this permit.

As per the June 2002 EPA TMDL Delist, ammonia has been delisted as an impairment in this subsegment. Assessment of new data and information shows this subsegment is meeting the water quality standard for this impairment. However, a limit has been established for ammonia based on the Petroleum Refining Guidelines, in 40 CFR 419, Subpart A at Outfall 001.

Suspected causes of concern remaining after this elimination process are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards.

See calculations in Appendix B-1 and B-2, which screened the reported effluent concentrations submitted by the permittee in their application for permit renewal, dated February 2006 against the Louisiana Water Quality Standards criteria for those parameters.

Monitoring frequencies for water quality based limited parameters are established in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

Site-Specific Consideration(s)

Interim effluent limits are proposed to commence on the effective date of the permit and expire on June 12, 2008.

Interim effluent reporting requirements:

Outfall 001

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> <u>(lbs/day)</u>	<u>DAILY MAXIMUM</u> <u>(lbs/day)</u>
Total Copper	---	Report
Total Mercury	---	Report
Benzo (a) anthracene	---	Report
Benzo (a) pyrene	---	Report

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Outfalls 002, 003, 004, 006, 007, 008, 011, and 012

<u>PARAMETER</u>	<u>MONTHLY AVERAGE (mg/L)</u>	<u>DAILY MAXIMUM (mg/L)</u>
Total Copper	---	Report
Total Mercury	---	Report

The final effluent limits are proposed to commence on June 13, 2008.

The final effluent schedule will require the following limitations:

Outfall 001

<u>PARAMETER</u>	<u>MONTHLY AVERAGE (lbs/day)</u>	<u>DAILY MAXIMUM (lbs/day)</u>
Total Copper	---	1.5600
Total Mercury	---	0.0108
Benzo (a) anthracene	---	0.0908
Benzo (a) pyrene	---	0.0908

Outfalls 002, 003, 004, 006, 007, 008, 011, and 012

<u>PARAMETER</u>	<u>MONTHLY AVERAGE (mg/L)</u>	<u>DAILY MAXIMUM (mg/L)</u>
Total Copper	---	Report
Total Mercury	---	Report

The TMDL assigned allocations for daily max monitoring only. There are no requirements placed on these parameters for monthly average monitoring.

Federal regulations under 40 CFR 130.7 require the State to incorporate all final TMDLs into its current Water Quality Management Plan (WQMP). The State is also required to ensure consistency with the WQMP requirements approved by EPA under Section 208(b) of the Clean Water Act (CWA), as cited under LAC 33.IX.2707.D.6. Since the requirements established in the Final TMDL (Federal Register Notice: Volume 67, Number 114, pages 40735 - 40737, 6/13/2002) are water quality-based effluent limitations that are part of the State's current Water Quality Management Plan (Volume 8), and are more stringent than the technology based effluent limitations, the TMDL waste load allocations must remain in the permit.

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D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 are as follows:

TOXICITY TESTS

FREQUENCY

Chronic static renewal 7-day
survival and growth test
using Mysidopsis bahia
[Method 1007.0]

1/quarter

Chronic static renewal 7-day
larval survival and growth test
using inland silverside minnow
(Menidia beryllina) [Method 1006.0]

1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and salinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

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Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 0.2%, 0.3%, 0.4%, 0.5%, and 0.7%. The low-flow effluent concentration (critical dilution) is defined as 0.5% effluent.

E. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.1./40 CFR 122.44(I)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 001 - Process Wastewaters

***Outfall 001 (Interim and Final)** - treated process wastewater and process area stormwater, and utility wastewater including boiler blowdown, hydrostatic test wastewater, and washdown wastewater.

Flow and pH - continuous monitoring has been retained from the current LPDES permit, effective August 1, 2003.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow (MGD)	Continuous
pH (standard units)	Continuous(*)

(*) continuous recorder with pH excursion requirements.

COD - A monitoring frequency of 3/week for the this pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. This frequency has been retained from the current LPDES permit, effective August 1, 2003.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
COD	3/week

BOD₅ - monitoring frequency of 2/week for the this pollutant is considered adequate for the protection of the receiving water and its designated uses as stated in Section VI.7. This frequency has been retained from the current LPDES permit, effective August 1, 2003.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
BOD ₅	2/week

TSS, Oil & Grease, Ammonia (as N), Sulfide (as S), Phenolic Compounds, Total chromium, and Hexavalent Chromium - A monitoring frequency of 1/week for this pollutant is considered adequate for the protection of the receiving water and its designated uses as

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stated in Section VI.7. These frequencies were retained from the current LPDES permit, effective August 1, 2003.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
TSS	1/week
Oil & Grease	1/week
Ammonia (as N)	1/week
Sulfide (as S)	1/week
Phenolic Compounds	1/week
Total Chromium	1/week
Hexavalent Chromium (6+)	1/week

Benzo (a) anthracene, Benzo (a) pyrene, Total Copper, and Total Mercury - Toxics with water quality based effluent limits listed in Section IX.C known to be in the discharge waters shall receive a monitoring frequency of 1/quarter. These frequencies were originally established by the Calcasieu Toxics TMDL issued on June 13, 2002, and retained from the current LPDES permit, effective August 1, 2003.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Benzo (a) anthracene	1/quarter
Benzo (a) pyrene	1/quarter
Total Copper	1/quarter
Total Mercury	1/quarter

Site-Specific Consideration(s) for Outfall 001 (Interim and Final)

None

2. Outfall 002 & 013 - Utility Wastewaters

***Outfall 002** - the discharge of low contamination potential stormwater runoff from storage tank secondary containment areas (first 0.5" (15 minutes) of rain event, stormwater will be routed to the wastewater treatment system used for Outfall 001 wastewaters), non-contact cooling water, and previously monitored hydrostatic test wastewater from Internal Outfall 013.

Flow, TOC, Oil & Grease, Total Copper, Total Mercury, and pH - a monitoring frequency has been established at 1/quarter for all parameters. These frequencies retained from the current LPDES permit, effective August 1, 2003.

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<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/quarter
TOC	1/quarter
Oil & Grease	1/quarter
Total Copper	1/quarter
Total Mercury	1/quarter
pH	1/quarter

Site-Specific Consideration(s) for Outfall 002

None

***Internal Outfall 013** - the discharge of hydrostatic test wastewater.

Flow, TSS, Oil & Grease, TOC, Benzene, Total BTEX, Total Lead, and pH - a monitoring frequency has been established at 1/discharge event for all parameters. These frequencies are consistent with those established in the LPDES Hydrostatic Test General Permit.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/discharge event
TSS	1/discharge event
Oil & Grease	1/discharge event
TOC	1/discharge event
Benzene	1/discharge event
Total BTEX	1/discharge event
Total Lead	1/discharge event
pH	1/discharge event

Site-Specific Consideration(s) for Outfall 013

None

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3. Outfall(s) 003, 004, 006, 007, 008, 011, and 012 - Stormwater

***Outfall 003** - the discharge of low contamination potential stormwater runoff from the middle and northern end of the plant in the vicinity of the maintenance building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 004** - the discharge of low contamination potential stormwater runoff from the middle and southern end of the plant in the vicinity of the office building area(s) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 006** - the discharge of low contamination potential stormwater runoff from the west side of the product tank farm (former Haymark Terminal Outfall 001) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 007** - the discharge of low contamination potential stormwater runoff from the east side of the product tank farm (former Haymark Terminal Outfall 002) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 008** - the discharge of low contamination potential stormwater runoff from the southeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 011** - the discharge of low contamination potential stormwater runoff from the north side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

***Outfall 012** - the discharge of low contamination potential stormwater runoff from the northeast side of the property (former Haymark Terminal) and previously monitored hydrostatic test wastewater from Internal Outfall 013.

Non-process area stormwater that is uncontaminated or has a low potential of contamination and is discharged at a discrete outfall, will receive monitoring frequencies according to the following schedule:

PARAMETER	MONITORING FREQUENCY
Flow	1/quarter
TOC	1/quarter
Oil & Grease	1/quarter
Total Copper	1/quarter
Total Mercury	1/quarter
pH	1/quarter

Site-Specific Consideration(s) for 003, 004, 006, 007, 008, 011, and 012

Flow, TOC, Oil & Grease, Total Copper, Total Mercury, and pH - monitoring frequencies for

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Outfalls 003 and 004 have been retained from the current LPDES permit, effective on August 1, 2003. Since Outfalls 006, 007, 008, 011, and 012 are similar in nature to Outfalls 003 and 004, the same monitoring frequency has been applied.

4. Outfalls 005, 009, and 010 - Sanitary Wastewater

***Outfall 005** - the discharge of treated sanitary wastewater from the main office and operations buildings

***Outfall 009** - the discharge of treated sanitary wastewater from the contractor break area/laboratory building

***Outfall 010** - the discharge of treated sanitary wastewater from the maintenance shop/office buildings.

Sanitary wastewater being discharged at discrete outfall(s), the monitoring frequency of sanitary wastewater follows LDEQ's sanitary general permits which are based on flow ("X" = Amount of Flow).

Class I, <5,000 gpd - All parameters, 1/6 months

PARAMETER	MONITORING FREQUENCY
Flow	1/6 months
BOD5	1/6 months
TSS	1/6 months
Fecal Coliform	1/6 months
pH	1/6 months

Site-Specific Consideration(s) for 005, 009, and 010

Flow, BOD₅, TSS, Fecal Coliform, and pH - monitoring frequency for Outfall 005 (former 104) has been retained from the current LPDES permit, effective on August 1, 2003. Since Outfalls 009 and 010 are similar in nature to Outfall 005, the same monitoring frequency has been applied.

X. Compliance History/DMR Review:

A Compliance History/DMR review has been completed covering the monitoring periods from January 2004 through June 2006.

A. Inspection Date - November 23, 2004

Facility inspection was done as a routine compliance evaluation. The following observations were noted:

- 1.) Records and reports were satisfactory

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2.) Site tour did not reveal any problems

B. DMRs - Excursions Reported from March January 2004 through June 2006.

Excursion reported under the 10/31/2005 date were associated with startup issues following Hurricane Rita. Calcasieu Refining Company experienced some exceedances associated with faulty equipment and the loss of viable organism base. The wastewater area of the plant was the area most affected by the storm and reported to have received approximately 4.5 feet of brackish water over the pumps and motors of the clarifier, DAF, aeration tanks, and chemical feed tanks. The aeration system was without power for approximately 13 days resulting in the stress of the bugs in the tank. This resulted in the Oil & Grease and TSS exceedances.

The pH exceedance was due to a faulty level gauge, also damaged by Hurricane Rita, which allowed the overflow of a caustic tank.

Calcasieu Refining Company fixed all problems associated with exceedances from Hurricane Rita in a timely and efficient manner.

DATE	OUTFALL	PARAMETER	REPORTED VALUE	PERMITTED VALUE
02/29/2004	001	Ammonia (as N)	46.4 lbs/day daily maximum	43 lbs/day daily maximum
05/31/2004	001	Chromium (6+)	0.14 lbs/day daily maximum	0.09 lbs/day daily maximum
12/31/2004	005	Fecal Coliform	> 400 Colonies/100 ml	400 Colonies/100 ml
09/30/2005	001	Chromium (6+)	0.10 lbs/day daily maximum	0.09 lbs/day daily maximum
10/31/2005	001	TSS	217 lbs/day monthly avg	157 lbs/day monthly average
			406 lbs/day daily maximum	244 lbs/day daily maximum
10/31/2005	001	Oil & Grease	66 lbs/day monthly avg	57 lbs/day monthly average
			136 lbs/day daily maximum	109 lbs/day daily maximum
10/31/2001	001	pH range excursion	pH out of range for greater than 60 minutes	pH range <60 minutes and/or no more than 446 minutes out of range in a month
11/30/2005	001	Chromium (6+)	0.12 lbs/day daily maximum	0.09 lbs/day daily maximum
05/31/2006	001	Total Phenolics	1.1 lbs/day monthly avg	0.4 lbs/day monthly average
			4.9 lbs/day daily maximum	1.6 lbs/day daily maximum

XI. "IT" Questions - Applicant's Responses

IT Questions and Calcasieu Refining Company's responses can be found in the LPDES permit application dated February 2006.

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XII. Endangered Species:

The receiving waterbody, Subsegment 030301 of the Calcasieu River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List